IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Canceled).

Claim 2 (Currently Amended): A video encoding apparatus comprising:

a feature amount computation unit configured to divide an input video signal into a plurality of scenes each comprising at least one temporally-continuous frame, and compute a statistical feature amount for each scene;

an encoding parameter generator to generate an encoding parameter for each scene based on the statistical feature amount computed by the feature amount computation unit;

a number-of-generated-bits prediction unit configured to predict the number of bits to be generated when the input video signal is encoded using the encoding parameter generated by the encoding parameter generator;

an encoding parameter correcting unit configured to correct the encoding parameter based on a result of the prediction of the number of generated bits which is obtained by the number-of-generated-bits prediction unit;

an encoder to encode the input video signal using the corrected encoding parameter and generate an encoded bit stream; and

an output unit configured to output the encoded bit stream generated by the encoder as an encoded output, wherein the encoding parameter generator includes a setting unit configured to ~~set~~ correct a frame rate and a quantization step by setting a weighted parameter to the frame rate as well as setting a ~~weight~~ weighted parameter to ~~a~~ the quantization step size for macro blocks of frames to be encoded for each scene on the bases of the statistical feature amount relating to a distribution of luminance for each macro block.

Claim 3 (Currently Amended): A video encoding apparatus comprising:

a feature amount computation unit configured to divide an input video signal into a plurality of scenes each comprising at least one temporally-continuous frame, and compute a statistical feature amount for each scene;

an encoding parameter generator to generate an encoding parameter for each scene based on the statistical feature amount computed by the feature amount computation unit;

a number-of-generated-bits prediction unit configured to predict the number of bits to be generated when the input video signal is encoded using the encoding parameter generated by the encoding parameter generator;

an encoding parameter correcting unit configured to correct the encoding parameter based on a result of the prediction of the number of generated bits which is obtained by the number-of-generated-bits prediction unit;

an encoder to encode the input video signal using the corrected encoding parameter and generate an encoded bit stream; and

an output unit configured to output the encoded bit stream generated by the encoder as an encoded output, wherein the feature amount computation unit includes a classification unit configured to classify the plurality of scenes into a plurality of scene types, based on the statistical feature amount relating to a motion vector, and the encoding parameter generator includes a setting unit configured to ~~set a~~ correct a frame rate and a quantization step by setting weight parameters to ~~a~~ the frame rate and ~~a~~ the quantization step size, respectively, for each scene according to the scene types.

Claim 4 (Currently Amended): The video encoding apparatus according to claim 3, wherein ~~the encoding parameter generator includes a~~ the setting unit is configured to set ~~a~~ the weight parameters to ~~a~~ the frame rate and the quantization step size for macro blocks of

frames to be encoded for each scene on the bases of the statistical feature amount relating to a distribution of luminance for each macro block.

Claim 5-15 (Canceled).

Claim 16 (Currently Amended): A video encoding method comprising:

dividing an input video signal into a plurality of scenes each comprising at least one temporally-continuous frame;

computing a statistical feature amount for each scene;

generating an encoding parameter for each scene based on the statistical feature amount computed by the feature amount computing step;

predicting the number of bits to be generated when the input video signal is encoded using the encoding parameter generated by the encoding parameter generating step;

correcting the encoding parameter based on a result of the prediction of the number of generated bits which is obtained by the number-of-generated-bits predicting step; and

encoding the input video signal using the corrected encoding parameter to generate an encoded bit stream,

wherein the encoding parameter generating step includes correcting a frame rate and a quantization step size by setting ~~a~~ weight parameters to ~~a~~ the frame rate and the quantization step size, respectively, for macro blocks of frames to be encoded for each scene on the bases of the statistical feature amount relating to a distribution of luminance for each macro block.

Claim 17 (Currently Amended): A video encoding method comprising:

dividing an input video signal into a plurality of scenes each comprising at least one temporally-continuous frame;

computing a statistical feature amount for each scene;

generating an encoding parameter for each scene based on the statistical feature amount computed by the feature amount computing step;

predicting the number of bits to be generated when the input video signal is encoded using the encoding parameter generated by the encoding parameter generating step;

correcting the encoding parameter based on a result of the prediction of the number of generated bits which is obtained by the number-of-generated-bits predicting step; and

encoding the input video signal using the corrected encoding parameter to generate an encoded bit stream, wherein the feature amount computing step includes classifying the plurality of scenes into a plurality of scene types, based on the statistical feature amount relating to a motion vector, and the encoding parameter generating step includes correcting a frame rate and a quantization step size by setting ~~a~~ weight parameters to ~~a~~ the frame rate and ~~a~~ the quantization step size, respectively, for each scene according to the scene types.

Claim 18 (Currently Amended): The method according to claim 17, wherein the encoding parameter generating step includes setting ~~a~~ the weight parameters to ~~a~~ the frame rate and the quantization step size, respectively, for macro blocks of frames to be encoded for each scene on the bases of the statistical feature amount relating to a distribution of luminance for each macro block.

Claim 19 (Currently Amended): A recording medium having a computer program recorded therein for encoding an input video signal, the computer program comprising:

instruction means for instructing the computer to divide an input video signal into a plurality of scenes each comprising at least one temporally-continuous frame and compute a statistical feature amount for each scene;

instruction means for instructing the computer to generate an encoding parameter for each scene based on the statistical feature amount;

instruction means for instructing the computer to predict the number of bits generated when ~~said~~ the input video signal is encoded using the encoding parameter;

instruction means for instructing the computer to correct the encoding parameter based on a result of the prediction of the number of generated bits; and

instruction means for instructing the computer to encode the input video signal using the corrected encoding parameter and generate an encoded bit stream,

wherein the means for instructing the computer to generate the encoding parameter includes means for instructing the computer to ~~set a~~ correct a frame rate and a quantization step size by setting weight parameters to the frame rate and ~~a~~ the quantization step size, respectively, for macro blocks of frames to be encoded for each scene on the bases of the statistical feature amount relating to a distribution of luminance for each macro block.

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 2-4 and 16-19 are pending in the present application. Claims 5-14 are canceled and Claims 2-4 and 16-19 are amended by the present amendment. Claims 1 and 15 were canceled by a previous amendment.

Amendments to Claims 2-4 and 16-19 find support in the originally filed specification at least at page 17, line 15, to page 18, line 16. Thus, no new matter is added.

In the outstanding Office Action, Claims 2-4 and 16-19 were rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 5,978,029 to Boice et al. (herein "Boice"). Applicants respectfully traverse that rejection.

Amended independent Claim 16 is directed to a video encoding apparatus that is configured, *inter alia*, to correct a frame rate as well as a quantization step size by setting weight parameters to the frame rate and quantization step size, respectively. Amended independent Claims 2, 3, 17 and 19 include similar features.

Conversely, Boice describes only increasing a quantization step size (Mquant) with lowering bit consumption.[1] However, Boice does not indicate correcting a frame rate and a quantization step size by setting weight parameters. Thus, Applicants respectfully submit that Boice does not teach or suggest "correcting a frame rate and a quantization step size by setting weight parameters to the frame rate and the quantization step size, respectively," as recited in amended independent Claim 16 and as similarly recited in amended independent Claims 2, 3, 17 and 19.

Accordingly, Applicants respectfully submit that independent Claims 2, 3, 16, 17 and 19, and claims depending therefrom, are allowable.

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[1] Boice at column 13, line 43.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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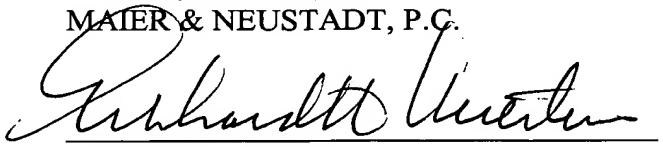

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